

ODFW AQUATIC INVENTORY PROJECT
OREGON PLAN FOR SALMON & WATERSHEDS
STREAM RESTORATION HABITAT REPORT

STREAM: Dement Creek Phase 2 (MS-357)
BASIN: Coquille River
SURVEY TYPE: Pre-Tx
DATE: July 10, 2007
SURVEY CREW: Scott Kuhn, Drew Harper
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 19.2 km²
USGS MAPS: Dement Creek
ECOREGION: Southern Oregon Coastal Mountains

GENERAL DESCRIPTION:

The Dement Creek habitat survey extended 1,141 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 1.4 (range: 1.1-2.0). Land use for the reach was second growth (15-30 cm dbh) trees and light grazing. The average unit gradient was 1.6 percent. Riffles (49%) and scour pools (47%) dominated stream habitat. Cobble (31%) and gravel (28%) dominated stream substrate. Wood volume was very low at 4.6 m³/100m.

COMMENTS:

There were no potential barriers to upstream fish migration in the surveyed length.

REACH 1

T30S-R12W-S19SW

REACH 1

Valley and Channel Summary

Valley Characteristics (Percent Reach Length)

<u>Narrow Valley Floor</u>		<u>Broad Valley Floor</u>	
Steep V-shape	0%	Constraining Terraces	0%
Moderate V-shape	100%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	1.4	VWI Range:	1.1 - 2

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	100%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	0%	Braided Channel	0%
Alt. Terrace/Hill	0%		
Landuse	0%		

Channel Characteristics

<u>Type</u>	<u>Length (m)</u>	<u>Area (m2)</u>	<u>Dry Units</u>
Primary Channel	1,141	5,689	0
Secondary Channel	0	0	0
Off-Channel Units	26	27	1

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 2
Width: 4.7	Width: 13.9	18.1 (13.8 - 28.3)	23.0 (16.2 - 29.8)
Depth: 0.43	Height: 0.8	1.5 (1 - 1.8)	1.9 (1.85 - 1.9)

W:D ratio: 19.7

Entrenchment (ACW:FPW ratio): 1.3

Stream Flow Type: LF

Habitat Units/100m (total channel length): 3.1

Average Unit Gradient: 1.6%

Habitat Units/100m (primary channel length): 3.2

Water temperature (°C): 15.0 - 15.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	LG
Riparian Vegetation:	D15	P

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	7%	Reach avg: 70%
Undercut Banks:	2%	Range: 47 - 92

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	60	5.3
Volume (m ³):	53	4.6
Key pieces (>=12m x 0.60m):	1	0.1

OREGON DEPT OF FISH AND WILDLIFE

DEMENT CREEK PHASE 2 PRE-TX (3-MS, 357)

HABITAT INVENTORY

Report Date: 11/21/2007

Survey Date:

7/10/2007

REACH 1		T30S-R12W-S19SW					REACH 1					
HABITAT DETAIL												
Habitat Type	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Large Boulders (#>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
POOL-BACKWATER	1	7	2.3	0.40	15	5	6	11	17	44	22	0
POOL-LATERAL SCOUR	8	275	6.4	0.96	1,795	56	20	21	24	20	10	4
POOL-PLUNGE	1	26	9.5	1.00	242	8	0	15	30	5	20	30
POOL-STRAIGHT SCOUR	4	123	5.2	0.60	664	40	5	15	29	22	9	20
PUDDLED UNIT	1	19	0.6	0.02	12	1	0	0	20	35	5	40
RAPID/BOULDERS	2	48	3.8	0.15	181	45	0	9	27	49	16	0
RIFFLE	13	469	4.1	0.17	1,959	265	3	13	33	39	9	3
RIFFLE W/ POCKETS	5	197	4.2	0.30	844	88	2	15	30	33	6	13
STEP/BEDROCK	1	4	0.9	0.05	3	0	0	0	0	0	0	100
Total:	36	1,166	4.7	0.43	5,715	508	Avg: 6	14	28	31	10	11

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		
					(m ²)	Percent	Number	(# / 100m ²)	
Dammed & BW Pools	1	7	2.3	0.40	15	0.27%	5	32.9	
Scour Pools	13	423	6.3	0.85	2,702	47.27%	104	3.8	
Glides	0	0			0	0.00%	0	0.0	
Riffles	18	666	4.2	0.21	2,803	49.05%	353	12.6	
Rapids	2	48	3.8	0.15	181	3.16%	45	24.9	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	1	4	0.9	0.05	3	0.06%	0	0.0	
Dry	1	19	0.6	0.02	12	0.20%	1	8.7	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	Total of all Channel Lengths		Primary Channel Length
	<u>Total</u>	<u># / Km</u>	<u># / Km</u>
All Pools:	14	12.0	12.3
Pools >=1m deep:	5	4.3	4.4
Complex pools (LWD pieces>=3):	4	3.4	3.5
Pool frequency (channel widths/pool):	6.0		
Residual pool depth (avg):	0.73		

OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY

DEMENT CREEK PHASE 2 PRE-TX
GCG: 3-MS SITE ID: 357

Survey Date 7/10/2007

RIPARIAN ZONE

Report Date: 11/7/2007

VEGETATION SUMMARY

REACH 1

Summary of Riparian Zone (0-30m) 3 transects

Total hardwoods/1000	1524
Total conifers/1000 ft	325
Total conifers >20" dbh/1000 ft	41
Total conifers >35" dbh/1000 ft	0

Average number of trees in a 5-meter wide band

Diameter class (cm)	Zone 1		Zone 2		Zone 3		Zones 1-3	
	0-10 meters		10 - 20 meters		20 - 30 meters		0-30 meters	
	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood
3-15cm	0.0	6.7	2.0	3.3	0.7	1.7	2.7	11.7
15-30cm	0.0	4.0	0.0	4.7	1.3	1.3	1.3	10.0
30-50cm	0.0	1.3	0.3	0.7	0.3	0.7	0.7	2.7
50-90cm	0.3	0.3	0.0	0.3	0.3	0.0	0.7	0.7
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.3	12.3	2.3	9.0	2.7	3.7	1.8	8.3

Canopy closure and ground cover

	Zone 1		Zone 2		Zone 3	
	0-10 meters		10 - 20 meters		20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	76		84		64	
Shrub cover	14		13		19	
Grass/forb cover	58		57		64	

Predominant landform in each zone

	Zone 1		Zone 2		Zone 3	
	0-10 meters		10 - 20 meters		20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	83		83		100	
High terrace	17		17		0	
Low terrace	0		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	39		36		44	

Summary of Riparian Zone (0-30m) for all reaches

3 transects

Summary of riparian zone (0-100 feet) extrapolated to 1,000 feet along stream

Total hardwoods/1000	1524
Total conifers/1000 ft	325
Total conifers >20" dbh/1000 ft	41
Total conifers >35" dbh/1000 ft	0

Average number of trees in a 5-m wide band

Diameter class (cm)	Zones 1-3	
	<u>0-30 meters</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	2.7	11.7
15-30cm	1.3	10.0
30-50cm	0.7	2.7
50-90cm	0.7	0.7
>90cm	0.0	0.0

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

Unit	Side	Zone	Surface	Slope	Cover (percent)			Diameter class (cm)					Notes		
					Canopy	Shrub	Grass	3-15	15-30	30-50	50-90	>90			
9	LT	1	HS	15	80	30	60	Conifer							
								Hardwood		1	1				
9	LT	2	HS	15	70	10	80	Conifer							
								Hardwood	4	1					
9	LT	3	HS	15	85	5	95	Conifer							
								Hardwood		4	1				
9	RT	1	HS	50	70	0	70	Conifer							
								Hardwood	9						
9	RT	2	HS	40	90	5	30	Conifer				1			
								Hardwood		2	1	1			
9	RT	3	HS	50	80	10	20	Conifer					1		
								Hardwood	1		1				
17	LT	1	HS	65	80	15	85	Conifer							
								Hardwood		1	1				
17	LT	2	HS	60	85	10	90	Conifer	1						
								Hardwood							
17	LT	3	HS	25	100	20	70	Conifer			1				WIRE FENCE AT 28 METERS, 30CM DEADTREE STILL
								Hardwood							
17	RT	1	HS	45	70	10	40	Conifer					1		
								Hardwood	4	5					
17	RT	2	HS	30	100	20	15	Conifer	3						
								Hardwood		7					
17	RT	3	HS	15	20	0	100	Conifer	2	3					OPEN MEADOW=80 PERCENT
								Hardwood							
25	LT	1	HS	50	75	15	65	Conifer							
								Hardwood	7	2	2				
25	LT	2	HS	50	90	15	70	Conifer							
								Hardwood	2	2	1				
25	LT	3	HS	80	70	20	60	Conifer							
								Hardwood	4						
25	RT	1	HT	10	80	15	30	Conifer							
								Hardwood		3		1			
25	RT	2	HT	20	70	20	55	Conifer	2						
								Hardwood	4	2					
25	RT	3	HS	80	30	60	40	Conifer			1				LARGE MASS OF DEAD TREES PILED
								Hardwood							

COMMENT SUMMARY

MONITORING AREA: 3-MS SITE ID: 357 STREAM: DEMENT CREEK PHASE 2 PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
4	RI	00	153.2	SS/	
10	LP	00	343		
16	RI	00	487.4	AM	FRG
17	LP	01	531.1	/TJ	
18	PD	11	531.1		ACW=3.8M
19	RI	00	564.8	AM	FRG
20	LP	00	597.9	AM	RSN
32	RI	00	998	/LA	
33	PP	00	1023.5	AM	RSN

